

Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 6,409,175 (Count I)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication “MetalSkin® Threaded Connections” bearing a 2013 copyright notice.
Preamble to Claim 1	“A method for sealing a connection between adjoining tubular bodies comprising:”	To the extent the preamble is a patent limitation, upon information and belief, during installation or operation of the MetalSkin® FODC-OR and WTXC Products, Weatherford performs a method for connecting and sealing together more than one pipe or tube in a solid expandable liner installation. <i>See generally</i> Ex. A (showing pipe threads unconnected and connected).
Claim Element 1(a)	“threadably engaging a threaded axial end of a first tubular body within a threaded axial end opening of a second tubular body whereby an annular area is defined between said first and said second tubular bodies;”	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by engaging a plurality of tubes having threaded ends, including one tube end having threads engaged within a second tube end, and forming an annular area between the two. <i>See, e.g.</i> , Ex. A, pp. 1-2, 4-5.
Claim Element 1(b)	“disposing a sealing component in said annular area between said first and second tubular bodies; and”	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by adding a sealing component in the annular area between the plurality of tubes, including an internal metal seal and/or O-ring seal. <i>See, e.g.</i> , Ex. A, pp. 4-5.
Claim element 1(c)	“radially expanding said first and said second tubular bodies to compress said sealing component between said first and second tubular bodies to seal the annular area between said first and second tubular bodies.”	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by radially expanding the tubes and thereby compressing the sealing component to seal the annular area between the tubes, particularly near the threaded portions. <i>See generally</i> Ex. A.

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 6,470,966 (Count II)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication “MetalSkin® Monobore Open-Hole Liner System” bearing 2011-2014 copyright notices (Ex. C).
Preamble to Claim 1	“An apparatus for expanding a tubular liner, comprising:”	To the extent the preamble is a patent limitation, upon information and belief, Weatherford’s MetalSkin® MOHLS Products are devices designed to expand a tubular liner, <i>i.e.</i> , a cylindrical pipe. <i>See generally</i> Ex. C.
Claim Element 1(a)	“a support member, the support member defining a first passage and a pressure relief passage;”	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products contain a support member to place the machine/device in a well, and such support member includes a first hydraulic passage, and a pressure relief passage, <i>i.e.</i> , an outer casing and inner pipe with centralizers having a passage to enable hydraulically assisted expansion, and a relief mechanism to equalize expansion pressure across the cone. <i>See, e.g.</i> , Ex. C, pp. 6-8 (explaining support member apparatus, and application and equalization of pressure).
Claim Element 1(b)	“an expansion mandrel coupled to the support member, the expansion mandrel defining a second passage;”	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products contain an expansion mandrel attached to the support member, <i>i.e.</i> , the expansion tool and cone assembly at the bottom of the product that a POSA would understand defines a second passage between the liner and the cone. <i>See, e.g.</i> , Ex. C, pp. 7-8 (describing hydraulic-based expansion).
Claim element 1(c)	“a tubular liner coupled to the expansion mandrel”	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products contain a tubular liner coupled to the expansion mandrel, <i>i.e.</i> , a POSA would understand that an expandable pipe such as a tubular liner is coupled to the expansion cone. <i>See, e.g.</i> , Ex. C, p. 8 (describing “pressur[ing] up to expand liner”).
Claim element 1(d)	“a shoe coupled to the tubular liner, the shoe	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products contain a shoe coupled to the tubular liner, the shoe defining a

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 6,470,966 (Count II)*

	defining a third passage; and”	third passage, <i>i.e.</i> , a tieback “shoe” or a “shoe” described as part of the “[s]lim-shoe design”, that a POSA would understand to define a third passage. <i>See, e.g.</i> , Ex. C, p. 7, 8 (describing design; drilling out of shoe).
Claim element 1(e)	“a flow control valve for controllably coupling the first passage and the pressure relief passage;”	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products contain a flow control valve for controllably coupling the first passage and the pressure relief passage, <i>i.e.</i> , a mechanism to equalize expansion pressure across the cone. <i>See e.g.</i> , Ex. C, p. 7 (describing expansion pressure equalization mechanism).
Claim element 1(f)	“wherein the first, second and third passages are operably coupled.”	Upon information and belief, Weatherford’s MetalSkin® MOHLS Products’ first, second and third passages are operably coupled, <i>i.e.</i> , each of the passages is capable of acting and changing in concert based on, or in dependency of, the pressure, flow, and other changes of the other passages. <i>See generally</i> Ex. C (describing operation of system).

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 6,892,819 (Count III)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication "MetalSkin® Cased-Hole Liner System" bearing 2011-2014 copyright notices.
Preamble to Claim 1	"An apparatus for radially expanding and plastically deforming a tubular member, comprising:"	To the extent the preamble is a patent limitation, upon information and belief, Weatherford's MetalSkin® CHLS Products are devices designed for radially expanding and plastically deforming a tubular member. <i>See generally</i> Ex. B.
Claim Element 1(a)	"a support member comprising a fluid passage;"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain a support member comprising a fluid passage, <i>i.e.</i> , a support member holds and pushes the device down a well and includes hydraulic passages and valves. <i>See, e.g.</i> , Ex. B, pp. 6-8 (explaining application of pressure).
Claim Element 1(b)	"a mandrel for radially expanding and plastically deforming the tubular member movably coupled to the support member for longitudinal displacement relative to the support member comprising an expansion cone;"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain a mandrel for radially expanding and plastically deforming the tubular member movably coupled to the support member for longitudinal displacement relative to the support member comprising an expansion cone, <i>i.e.</i> , the expansion tool and cone may radially expand and plastically deform the pipe or casing as it travels up the well relative to the support column at the top. <i>See, e.g.</i> , Ex. B, p. 8 (middle figure).
Claim element 1(c)	"at least one pressure chamber defined by and positioned between the support member and mandrel fluidly coupled to the first fluid passage; and"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain at least one pressure chamber defined by and positioned between the support member and mandrel fluidly coupled to the first fluid passage, <i>i.e.</i> , such a pressure chamber is present in the hydraulic hold-down sub and the hydraulic setting tool which operate "to activate the expansion tool, initiate expansion, and set the anchor." <i>See, e.g.</i> , Ex. B, pp. 7-8.

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Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 6,892,819 (Count III)*

Claim element 1(d)	“one or more releasable supports coupled to the support member adapted to support the tubular member.”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain one or more releasable supports coupled to the support member adapted to support the tubular member, <i>i.e.</i> , the elastomer seal elements, and the carbide anchor that are coupled to the support member and designed to release to support the expandable tubular member. <i>See, e.g.</i> , Ex. B, pp. 6-8.
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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,055,608 (Count IV)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication "MetalSkin® Cased-Hole Liner System" bearing 2011-2014 copyright notices.
Preamble to Claim 1	"A method of creating a casing in a borehole located in a subterranean formation, comprising:"	To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves creating a casing in an underground well. <i>See generally</i> Ex. B.
Claim Element 1(a)	"supporting a tubular liner and an expansion device in the borehole using a support member;"	Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves supporting a tubular liner and an expansion device in the borehole using a support member, <i>i.e.</i> , a support member holds and pushes a solid expandable tubing device down a well. <i>See generally</i> , Ex. B, pp. 6-8.
Claim Element 1(b)	"injecting fluidic material into the borehole;"	Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves injecting fluidic material into the borehole, <i>i.e.</i> , a POSA reviewing Exhibit B would understand that the "[p]repare well" step includes injecting a fluidic material in part to facilitate the "[s]tab in work" of the string and protect the cone from downhole debris. <i>See, e.g.</i> , Ex. B, pp. 7-8.
Claim Element 1(c)	"pressurizing an interior region of the expansion device;"	Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves pressurizing an interior region of the expansion device, <i>i.e.</i> , in the understanding of a POSA, the expansion tool is "activate[d]" by "[a]pply[ing] hydraulic pressure" in an interior region in the tool. <i>See, e.g.</i> , Ex. B, pp. 7-8.
Claim Element 1(d)	"displacing a portion of the expansion device relative to the support member and the tubular liner in the longitudinal direction; and"	Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves displacing a portion of the expansion device relative to the support member and the tubular liner in the longitudinal direction, <i>i.e.</i> , the expansion tool operates to move out of the well relative to the support

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Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,055,608 (Count IV)*

		member and following the expandable liner. <i>See, e.g.,</i> Ex. B, p. 8 (fourth figure from left).
Claim Element 1(e)	“radially expanding the tubular liner;”	Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves radially expanding the tubular liner. <i>See generally</i> Ex. B.
Claim Element 1(f)	“wherein the expansion device reciprocates relative to the support member in the longitudinal direction.”	Upon information and belief, such radial expansion of the tubular liner in connection with installing or operating Weatherford’s MetalSkin® CHLS Products involves the expansion device reciprocating relative to the support member in the longitudinal direction, <i>i.e.</i> , a POSA would understand that the expansion tool reciprocates relative to the support member as it travels up the well.

Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,077,211 (Count V)*

Claim Element	Claim Element Recitation	Analysis referring to (i) the Weatherford publication “MetalSkin® Cased-Hole Liner System” bearing 2011-2014 copyright notices (Ex. B), and to (ii) the Weatherford publication “MetalSkin® Monobore Open-Hole Liner System” bearing 2011-2014 copyright notices (Ex. C).
Preamble to Claim 1	“A method of creating a casing in a borehole located in a subterranean formation, comprising:”	<p>(i) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves creating a casing in an underground well. <i>See generally</i> Ex. B.</p> <p>(ii) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves creating a lining in an underground well. <i>See generally</i> Ex. C.</p>
Claim Element 1(a)	“supporting a tubular liner and an expansion device in the borehole using a support member;”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves supporting a tubular liner and an expansion device in the borehole using a support member, <i>i.e.</i>, a support member holds and pushes a solid expandable tubing device down a well. <i>See generally</i>, Ex. B, pp. 6-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves supporting a tubular liner and an expansion device in the borehole using a support member, <i>i.e.</i>, a supporting system, pipe, or component supporting the solid expansion cone and expandable liner in the well. <i>See, e.g.</i>, Ex. C, pp. 6-8.</p>
Claim Element 1(b)	“injecting fluidic material into the borehole;”	(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves injecting fluidic material into the borehole, <i>i.e.</i> , a POSA reviewing Exhibit B would understand that the “[p]repare well” step includes injecting a fluidic material in part to facilitate the “[s]tab in work” of the string and

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Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,077,211 (Count V)*

		<p>protect the cone from downhole debris, or fluid is pumped to facilitate the hydraulic expansion of the cone. <i>See, e.g.</i>, Ex. B, pp. 7-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford's MetalSkin® MOHLS Products involves injecting fluidic material into the borehole, <i>i.e.</i>, cement is pumped into the borehole for a liner, or fluid is pumped to facilitate the hydraulic expansion of the cone. <i>See generally</i>, Ex. C.</p>
Claim Element 1(c)	"pressurizing an interior region of the expansion device;"	<p>(i) Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves pressurizing an interior region of the expansion device, <i>i.e.</i>, the expansion tool is "activate[d]" by "[a]pply[ing] hydraulic pressure" requiring an interior region in the tool. <i>See, e.g.</i>, Ex. B, pp. 7-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford's MetalSkin® MOHLS Products involves pressurizing an interior region of the expansion device, <i>i.e.</i>, providing pressure to the expansion cone to begin to expand the liner. <i>See, e.g.</i>, Ex. C, p. 8.</p>

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Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,077,211 (Count V)*

Claim Element 1(d)	“displacing a portion of the expansion device relative to the support member and the tubular liner in the longitudinal direction; and”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves displacing a portion of the expansion device relative to the support member and the tubular liner in the longitudinal direction, <i>i.e.</i>, the expansion tool operates to move out of the well relative to the support member and following the expandable liner. <i>See, e.g.</i>, Ex. B, p. 8 (fourth figure from left).</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves displacing a portion of the expansion device relative to the support member and the tubular liner in the longitudinal direction, <i>i.e.</i>, the expansion tool operates to move out of the well relative to the support member and following the expandable liner. <i>See, e.g.</i>, Ex. C, p. 8 (fourth through sixth figures from the left).</p>
Claim Element 1(e)	“radially expanding the tubular liner.”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves radially expanding the tubular liner. <i>See generally</i> Ex. B.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves radially expanding the tubular liner, <i>i.e.</i>, expansion of the tubular red liner. <i>See, e.g.</i>, Ex. C, p. 8 (fourth through sixth figures from the left).</p>

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Appendix

Twombly Analysis of Exemplary Claim 46 of U.S. Patent No. 7,159,665 (Count VI)*

Claim Element	Claim Element Recitation	Analysis referring to (i) the Weatherford publication “MetalSkin® Cased-Hole Liner System” bearing 2011-2014 copyright notices (Ex. B), and to (ii) the Weatherford publication “MetalSkin® Monobore Open-Hole Liner System” bearing 2011-2014 copyright notices (Ex. C).
Preamble to Claim 46	“A method of creating a casing in a borehole located in a subterranean formation, comprising:”	<p>(i) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves creating a casing in an underground well. <i>See generally</i> Ex. B.</p> <p>(ii) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves creating a lining in an underground well. <i>See generally</i> Ex. C.</p>
Claim Element 46(a)	“installing a tubular liner containing a tubular expansion cone in the borehole;”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves installing a tubular liner containing a tubular expansion cone in the borehole, <i>i.e.</i>, an expandable liner and a solid expandable tubing device having a cone is installed in the well. <i>See generally</i>, Ex. B, pp. 6-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves installing a tubular liner containing a tubular expansion cone in the borehole, <i>i.e.</i>, an expandable liner and a solid expandable tubing device having a cone is installed in the well. <i>See generally</i>, Ex. C.</p>
Claim Element 46(b)	“injecting fluidic material into the tubular liner through the tubular expansion cone;”	(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves injecting fluidic material into the tubular liner through the tubular expansion cone, <i>i.e.</i> , a POSA reviewing Exhibit B would understand that the “[p]repare well” step

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Appendix

Twombly Analysis of Exemplary Claim 46 of U.S. Patent No. 7,159,665 (Count VI)*

		<p>includes injecting a fluidic material during or after initial installation of a tubular liner and a mandrel in part to facilitate the “[s]tab in work” of the string, protect the cone from downhole debris, and facilitate removal of the expansion cone. <i>See, e.g.</i>, Ex. B, pp. 7-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves injecting fluidic material into the borehole, <i>i.e.</i>, cement is pumped into the borehole for a liner, or fluid is pumped to facilitate the hydraulic expansion of the cone. <i>See generally</i>, Ex. C.</p>
Claim Element 46(c)	“pressurizing an interior region of the tubular liner below the tubular expansion cone; and”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves pressurizing an interior region of the tubular liner below the tubular expansion cone, <i>i.e.</i>, an interior region of the tubular liner below expansion cone tool is pressurized to facilitate the subsequent expansion of the tubing. <i>See, e.g.</i>, Ex. B, pp. 6-8 (including middle figure on page 8 indicating gap between expansion cone and tube that is pressurized).</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves pressurizing an interior region of the expansion device, <i>i.e.</i>, a POSA would understand that the MetalSkin® MOHLS Products provide pressure below the expansion cone to expand the liner. <i>See, e.g.</i>, Ex. C, pp. 6-8.</p>

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Twombly Analysis of Exemplary Claim 46 of U.S. Patent No. 7,159,665 (Count VI)*

Claim Element 46(d)	“radially expanding and extruding the tubular liner off of the tubular expansion cone;”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves radially expanding and extruding the tubular liner off of the tubular expansion cone, <i>i.e.</i>, the expansion tool causes the solid expansion of the tubing away from such tool. <i>See, e.g.</i>, Ex. B, p. 8 (fourth figure from left).</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves radially expanding the tubular liner, <i>i.e.</i>, the expansion tool causes the solid expansion of the tubing away from such tool. <i>See, e.g.</i>, Ex. C, p. 8 (fourth through sixth figures from the left).</p>
Claim Element 46(e)	“wherein the interface between the tubular liner and the tubular expansion cone does not include a fluid tight seal.”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products, the interface between the tubular liner and the tubular expansion cone does not include a fluid tight seal, <i>i.e.</i>, in the understanding of a POSA, there is no “O-ring” or elastomeric seal at the interface between the liner and cone. <i>See generally</i> Ex. B.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products, the interface between the tubular liner and the tubular expansion cone does not include a fluid tight seal, <i>i.e.</i>, in the understanding of a POSA, there is no “O-ring” or elastomeric seal at the interface between the liner and cone. <i>See generally</i> Ex. C.</p>

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Appendix

Twombly Analysis of Exemplary Claim 13 of U.S. Patent No. 7,240,729 (Count VII)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication “MetalSkin® Cased-Hole Liner System” bearing 2011-2014 copyright notices.
Preamble to Claim 13	“An apparatus for expanding a tubular member, comprising:”	To the extent the preamble is a patent limitation, upon information and belief, the Weatherford MetalSkin® CHLS Products are devices designed to expand a tubular liner or member. <i>See generally</i> Ex. B.
Claim Element 13(a)	“a support member comprising a fluid passage;”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain a support member comprising a fluid passage, <i>i.e.</i> , the products contain a support member to place the machine/device in a well, and such support member comprises fluid (hydraulic) passages and valves, including one such passage to relieve pressure. <i>See, e.g.</i> , Ex. B, pp. 6-8 (explaining application and release of pressure).
Claim Element 13(b)	“an expansion device for expanding the tubular member slidably coupled to the support member, wherein the expansion device comprises one or more tubular pistons;”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain an expansion device for expanding the tubular member slidably coupled to the support member, wherein the expansion device comprises one or more tubular pistons, <i>i.e.</i> , a POSA reviewing Exhibit B would understand that the expansion device moves relative to the support member and that it contains at least a tubular piston to sufficiently effectuate the expansion of the tubular members in the casing. <i>See, e.g.</i> , Ex. B, pp. 6-8.
Claim element 13(c)	“at least one pressure chamber defined by and positioned between the support member and the expansion device fluidly coupled to the fluid passage; and”	Upon information and belief, the Weatherford MetalSkin® CHLS Products contain at least one pressure chamber defined by and positioned between the support member and the expansion device fluidly coupled to the fluid passage, <i>i.e.</i> , a pressure chamber between the expansion tool and the support member in the same circuit as the fluid passage, which may permit activation of the expansion tool. <i>See, e.g.</i> , Ex. B, pp. 6-8.

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Appendix

Twombly Analysis of Exemplary Claim 13 of U.S. Patent No. 7,240,729 (Count VII)*

Claim element 13(d)	“one or more releasable supports coupled to the support member adapted to internally grip and support the tubular member at a plurality of locations thereon during operation of the expansion device.”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain one or more releasable supports coupled to the support member adapted to internally grip and support the tubular member at a plurality of locations thereon during operation of the expansion device, <i>i.e.</i> , the elastomer seal elements, and the carbide anchor that are coupled to the support member and designed to internally grip and support the expandable casing tubular member. <i>See, e.g.</i> , Ex. B, pp. 6-8 (identifying a plurality of locations).
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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,290,616 (Count VIII)*

Claim Element	Claim Element Recitation	Analysis referring to (i) the Weatherford publication "MetalSkin® Cased-Hole Liner System" bearing 2011-2014 copyright notices(Ex. B), and to (ii) the Weatherford publication "MetalSkin® Monobore Open-Hole Liner System" bearing 2011-2014 copyright notices (Ex. C).
Preamble to Claim 1	"A method of coupling a radially expandable tubular member to a preexisting structure, comprising:"	(i) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves creating a casing in an already existing underground well that may already have a liner. <i>See generally</i> Ex. B. (ii) To the extent the preamble is a patent limitation, upon information and belief, installing or operating Weatherford's MetalSkin® MOHLS Products involves creating a casing including with a tubular liner or pipe in an already existing structure such as a borehole. <i>See generally</i> Ex. C, p. 8 (first two figures from the left).
Claim Element 1(a)	"positioning the tubular member and an expansion device within the preexisting structure;"	(i) Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves positioning the tubular member and an expansion device within the preexisting structure, <i>i.e.</i> , a support member holds and pushes a solid expandable tubing device, along with tubing, down a well. <i>See generally</i> , Ex. B, pp. 6-8. (ii) Upon information and belief, installing or operating Weatherford's MetalSkin® MOHLS Products involves positioning the tubular member and an expansion device within the preexisting structure, <i>i.e.</i> , a support member holds and pushes a solid expandable tubing device, along with tubing, down a well. <i>See generally</i> , Ex. C, pp. 6-8.
Claim Element 1(b)	"injecting fluidic materials into the tubular member;"	(i) Upon information and belief, installing or operating Weatherford's MetalSkin® CHLS Products involves injecting fluidic materials into the tubular member, <i>i.e.</i> , a POSA reviewing

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,290,616 (Count VIII)*

		<p>Exhibit B would understand that the “[p]repare well” step includes injecting a fluidic material into the tubular member in part to facilitate the “[s]tab in work” of the string and protect the cone from downhole debris. <i>See, e.g.</i>, Ex. B, pp. 7-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves injecting fluidic material into the borehole, <i>i.e.</i>, cement is pumped into a portion between the tubular liner, or fluid is pumped to facilitate the hydraulic expansion of the cone. <i>See generally</i>, Ex. C.</p>
Claim Element 1(c)	“sensing the operating pressure of the fluidic materials; and”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves sensing the operating pressure of the fluidic materials, <i>i.e.</i>, determining whether sufficient fluidic materials have been injected to facilitate the “[s]tab in work” of the string and protect the cone from downhole debris. <i>See, e.g.</i>, Ex. B, pp. 7-8.</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves sensing the operating pressure of the fluidic materials, <i>i.e.</i>, determining whether sufficient cement or fluid for hydraulic expansion has been injected. <i>See, e.g.</i>, Ex. C, p. 8 (figures indicating pumping and ceasing pumping of cement and also of fluid for hydraulic expansion).</p>

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,290,616 (Count VIII)*

Claim Element 1(d)	“radially expanding the tubular member into contact with the preexisting structure when the sensed operating pressure exceeds a predetermined amount by displacing the expansion device relative to the tubular member.”	<p>(i) Upon information and belief, installing or operating Weatherford’s MetalSkin® CHLS Products involves radially expanding the tubular member into contact with the preexisting structure when the sensed operating pressure exceeds a predetermined amount by displacing the expansion device relative to the tubular member, <i>i.e.</i>, a POSA would understand that for cased-hole applications, the expansion tool is activated upon an application of hydraulic pressure, and that it operates at a certain pressure setting to expand the liner by pushing it out and into contact with the preexisting well casing. <i>See, e.g.</i>, Ex. B, p. 8 (third and fourth figures from left).</p> <p>(ii) Upon information and belief, installing or operating Weatherford’s MetalSkin® MOHLS Products involves radially expanding the tubular member into contact with the preexisting structure when the sensed operating pressure exceeds a predetermined amount by displacing the expansion device relative to the tubular member, <i>i.e.</i>, a POSA would understand that for open-hole liner systems, the expansion tool is activated by a “pressure up” of the tool, and that it operates at a certain pressure setting to expand the liner by pushing it out and into contact with a well casing. <i>See, e.g.</i>, Ex. C, p. 8 (fifth and sixth figures from the left).</p>
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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,434,618 (Count IX)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication "MetalSkin® Cased-Hole Liner System" bearing 2011-2014 copyright notices.
Preamble to Claim 1	"An apparatus for radially expanding and plastically deforming a tubular member, comprising:"	To the extent the preamble is a patent limitation, upon information and belief, the Weatherford MetalSkin® CHLS Products are devices designed to radially or plastically expand or deform a tubular liner or member. <i>See generally</i> Ex. B.
Claim Element 1(a)	"a support member, comprising:"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain a support member comprising multiple different components, <i>i.e.</i> , the products contain a support member to place the expansion device in a well. <i>See, e.g.</i> , Ex. B, pp. 6-8.
Claim Element 1(b)	"an expansion device for radially expanding and plastically deforming the tubular member movably coupled to the support member for longitudinal displacement relative to the support member;"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain an expansion device for radially expanding and plastically deforming the tubular member movably coupled to the support member for longitudinal displacement relative to the support member, <i>i.e.</i> , a POSA reviewing Exhibit B would understand that the expansion device moves relative to the support member while causing expansion of the tubular members. <i>See, e.g.</i> , Ex. B, pp. 6-8.
Claim Element 1(c)	"at least one pressure chamber defined by and positioned between the support member and expansion device; and"	Upon information and belief, the Weatherford MetalSkin® CHLS Products contain at least one pressure chamber defined by and positioned between the support member and expansion device, <i>i.e.</i> , a pressure chamber between the expansion tool and the support member in the same circuit as the fluid passage. <i>See, e.g.</i> , Ex. B, p. 7 (indicating a plurality of such chambers).

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,434,618 (Count IX)*

Claim Element 1(d)	“at least one releasable support coupled to the support member adapted to support the tubular member;”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain at least one releasable support coupled to the support member adapted to support the tubular member, <i>i.e.</i> , the elastomer seal elements and the carbide anchor that are coupled to the support member and designed to support the expandable tubular member. <i>See, e.g.</i> , Ex. B, pp. 6-8.
Claim Element 1(e)	“wherein the at least one releasable support is positioned above the expansion device.”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products wherein at least one releasable support is positioned above the expansion device, <i>i.e.</i> , the elastomer seal elements and the carbide anchor are positioned above the expansion device. <i>See, e.g.</i> , Ex. B, pp. 6-8.

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,918,284 (Count X)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication "MetalSkin® Threaded Connections" bearing 2013 copyright notice.
Preamble to Claim 1	"A method, comprising:"	To the extent the preamble is a patent limitation, upon information and belief, during installation and operation of the MetalSkin® FODC-OR and WTXC Products, Weatherford performs a method or set of steps. <i>See generally</i> Ex. A.
Claim Element 1(a)	"coupling an end of a first tubular member to an end of a tubular sleeve;"	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by engaging a plurality of tubes having threaded ends, including one tube end having threads engaged with a "protective metal" or tubular "sleeve." <i>See, e.g.,</i> Ex. A, pp. 4-5.
Claim Element 1(b)	"coupling an end of a second tubular member to another end of the tubular sleeve;"	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by engaging a plurality of tubes having threaded ends, including a second tube end having threads engaged with the "protective metal" or tubular "sleeve." <i>See, e.g.,</i> Ex. A, pp. 4-5.
Claim Element 1(c)	"abutting the ends of the first and second tubular members;"	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by abutting the ends of the first and second tubular members, <i>i.e.</i> , the ends are moved close to each other while still remaining inside the sleeve. <i>See, e.g.,</i> Ex. A, pp. 4-5.
Claim Element 1(d)	"displacing an expansion device within and relative to the first tubular member, the second tubular member and the tubular sleeve; and"	Upon information and belief, a POSA would understand that Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products in conjunction with a solid expansion device to expand both tubular members and the sleeve. <i>See, e.g.,</i> Ex. A, p. 2 (discussing product features relative to radial expansion of threaded connections).

Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,918,284 (Count X)*

Claim Element 1(e)	“radially expanding and plastically deforming the first tubular member and the second tubular member in response to and while displacing the expansion device.”	Upon information and belief, Weatherford installs or operates the MetalSkin® FODC-OR and WTXC Products by radially expanding and plastically deforming the first tubular member and the second tubular member in response to and while displacing the expansion device, <i>i.e.</i> , the expansion tool in a solid expandable system would radially expand both coupled tubular members. <i>See generally</i> Ex. A.
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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,967,064 (Count XI)*

Claim Element	Claim Element Recitation	Analysis referring to the Weatherford publication "MetalSkin® Cased-Hole Liner System" bearing 2011-2014 copyright notices.
Preamble to Claim 1	"An apparatus for radially expanding and plastically deforming a tubular member, comprising:"	To the extent the preamble is a patent limitation, upon information and belief, Weatherford's MetalSkin® CHLS Products are devices designed for radially expanding and plastically deforming a tubular member. <i>See generally</i> Ex. B.
Claim Element 1(a)	"a support member comprising a fluid passage;"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain a support member comprising a fluid passage, <i>i.e.</i> , a support member holds and pushes the device down a well and includes hydraulic passages and valves. <i>See, e.g.</i> , Ex. B, pp. 6-8 (explaining application of pressure).
Claim Element 1(b)	"a mandrel movably coupled to said support member, wherein said mandrel comprises an expansion cone operable to radially expand and plastically deform the tubular member when moved relative to said tubular member;"	Upon information and belief, Weatherford's MetalSkin® CHLS Products contain a mandrel movably coupled to said support member, wherein said mandrel comprises an expansion cone operable to radially expand and plastically deform the tubular member when moved relative to said tubular member, <i>i.e.</i> , the expansion tool and cone connected to the support member may radially expand and plastically deform the pipe or casing as it travels up the well relative to the pipe or casing. <i>See, e.g.</i> , Ex. B, p. 8 (middle figure).
Claim Element 1(c)	"a pressure chamber positioned between said support member and said mandrel, wherein said pressure chamber is fluidly coupled to the first fluid passage; and"	Upon information and belief, the Weatherford MetalSkin® CHLS Products contain a pressure chamber positioned between said support member and said mandrel, wherein said pressure chamber is fluidly coupled to the first fluid passage, <i>i.e.</i> , a pressure chamber between the expansion tool and the support member in the same circuit as the fluid passage, which may permit activation of the expansion tool. <i>See, e.g.</i> , Ex. B, pp. 6-8.

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Appendix

Twombly Analysis of Exemplary Claim 1 of U.S. Patent No. 7,967,064 (Count XI)*

Claim Element 1(d)	“a releasable support coupled to said support member above said mandrel and operable to contact the tubular member so as to selectively couple said support member to the tubular member.”	Upon information and belief, Weatherford’s MetalSkin® CHLS Products contain a releasable support coupled to said support member above said mandrel and operable to contact the tubular member so as to selectively couple said support member to the tubular member, <i>i.e.</i> , the elastomer seal elements and the carbide anchor are coupled to the support member and designed to release to support the expandable tubular member. <i>See, e.g.</i> , Ex. B, pp. 6-8 (showing such seals and anchors located above the expansion tool).
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